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Teaching

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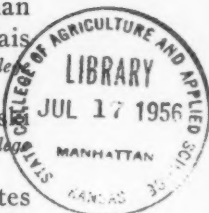
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TWO NEW BOOKS ON COLLEGE TEACHING



Improving College and University Teaching

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The Reclamation of Wastelands

A university faculty once sponsored a lecture series on the theme "Books Often Talked About but Seldom Read." Educational wastelands are being much talked about. If the talk has not penetrated into college and university classrooms, it is time that it should, in order that something other than talk can take place. The wastelands that really matter are in the classrooms where teaching and learning are centered. Teachers need to be aware of the wastelands so that each of us can help in reclaiming them.

Some educational wastelands, of course, can be reclaimed only by action of administrators or of faculties, or by concerted action of many groups. What wastelands can be dealt with single handed by teachers? One need not search long or far to find some examples.

❑ To keep a class of thirty waiting while an instructor fumbles among his notes, or hunts a piece of chalk, may take only a minute but aggregates a half hour wasted. Teachers or students who do not talk loudly or clearly enough, or who suddenly drop their voices, cause students to miss something they ought to hear or cause time use for repetition. Class time is precious; most instructors regard it inadequate. None of us has any to waste.

❑ Physical comfort is a requisite for effective learning. A classroom that is too warm or too cold, ill ventilated, inadequately or glaringly lighted, or disturbed by noise saps energy, thwarts the teaching-learning process.

❑ An almost unmentionable waste occurs when an instructor appears unprepared before his class. To cover his predicament he probably talks too much and to little purpose. This might be a day when he should draw out his students.

❑ In a recent discussion an instructor revealed that the single purpose in his course apparently was the memorization of facts and data. Other valuable goals—deepened interest in the subject, appreciation of its significant facets and relationships outside itself, habits and skills belonging to the subject or which its study facilitates—

seemed to have no place. He tested only for facts. Attention to other goals, however, might aid the student even in factual mastery. Neglect of them impoverishes the learning.

❑ Often we ignore the previous work students have had—in high school, even in other college courses. Many a professor, while lamenting his lack of time, doubtless has wasted unreckoned time needlessly teaching things some of his students already knew. The waste may be more than time waste. Boredom for students, habits of inattention, demoralization of interest and effort may leave lasting damage.

❑ Like a cook who just can't cook, some instructors serve a savorless fare. Students endure it stoically or seethe with distaste. Under inspiring teaching, students become enthusiastic about a subject they never expected to like, or find a stronger and lasting interest in a subject of their choice. The outcomes of savorless teaching, in contrast, are worse than waste because a dislike for a subject may be like a blight on a student's later development.

❑ Examination papers, instead of being discarded, can provide profitable topics for class discussion. Students, having taken the test, are more or less alerted to the question posed. A class group in which papers were discussed showed superior performance on a later retest compared to a class in which there was no discussion of papers.

❑ Poorly directed effort mars too much of our teaching. A teacher's duty includes being sure that his students know what they are trying to do in his course. Yet it is charged that many teachers keep on doing things that have always been done without thought of why or attempting to clarify their teaching aims. Are many of us blind leaders of the blind?

❑ Unless a student performs as he should outside of class, he reaps diminished value from the class experience. The student philosophy of giving as little as possible in the hope of getting something anyway—specifically, a degree—is a source of waste. The teacher's task properly includes putting students on an eight hour day.

❑ A related malady is the student attitude that he is in college to have something done to him. Even well meaning teachers seem to accept the role thus given them. Yet the teacher's role is to activate the student. The student's role cannot be a passive one. He is in college to do things to and for himself, stimulated, aided, and guided by teachers. Unless he throws himself into his task, his years in college become waste. Student passivity is a deadly malady, and the college or university teacher should be physician enough to treat it.

These wastes are in real measure within the ability of any college teacher to correct. They do not require primarily either administrative or group attack. Every college teacher should give these wastes a clearer place in his consciousness and lay them heavily on his conscience.

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Planning Instruction

Two Brooklyn College professors, one in education and one in physics, have collaborated in writing a new book, "College Teaching: Its Practice and Its Potential" published by Harper & Brothers. Both men are graduates of the College of the City of New York; both hold Ph.D. degrees from Columbia University in their respective disciplines. In addition to college teaching, each has had practical experience on the college level in administration, supervision, and curriculum planning and development. Dr. Justman has published books and articles in secondary and in higher education. Dr. Mais is known for his work on the scattering of molecular beams, measurement of specific heats, and development of laboratory and lecture equipment. He is currently chairman of the Department of Physics and acting dean of the faculty. Readers are referred to their notable new book (see review on another page), a portion of one chapter of which is here presented by permission of authors and publisher.

By JOSEPH JUSTMAN
WALTER H. MAIS

The need for preparing for instruction is too evident to warrant justification. The self-respecting teacher will not meet a class without having reflected in advance on the substance of the lesson, checked on elusive details of fact, and assembled accessory materials. Most likely he will have proceeded further, shaping in his mind specific procedure, salient points of discussion, and supplemental student activity. All this is performed as a matter of professional routine. In some cases preparation is necessarily more thorough: a lecture in Constitutional Law may require extended research and precise documentation; an experimental demonstration may involve setting up complicated apparatus and a preliminary trial-run; the simplest field trip usually demands detailed preparatory arrangements.

Were the teacher the only factor in the situation, preparation for teaching could be essentially a matter of refreshing one's scholarship with only casual reference to the mode of instruction. But there are students to be considered, and they complicate the picture. Each situation involving learners is different from every other, and the fact that a course has been taught successfully in the past does not assure that it is being taught

successfully now. The experience a teacher has gained improves his prospects for success in future instruction. But like the experienced general who must plan each campaign differently, the teacher needs to approach each new term as a separate challenge. The values of experience are dissipated if the teacher merely stirs up memories of past performance, resuscitates old notes, and relies on further improvisation to pull him through. Planning instructional method is no more fundamental than preparation in scholarship, but it is a second requisite for effective teaching.

Planning of instructional method involves deliberate selection among the possible techniques of teaching. Laxity in this respect helps to explain why teaching so often falls into conventional molds of the lecture, discussion, or recitation: these are most "natural" and easiest. Referring to the lecture as "the characteristic method of higher education" Schueler thus explains its frequency of use:

It is easier to lecture, not to lecture well but just to lecture, than to engage in almost any other kind of teaching activity. The professor faced with the necessity of teaching the effect on world trade of currency devaluation, or the influence of Freud on the novel of the twentieth century, finds it simplest to prepare a lecture which, once delivered, can be assumed to have "covered" the subject. The problem of considering the relationship of his students, as individuals and as a group, to the subject, the ways in which they may react to it, and the ways which may be used by the teacher to bring them closer to it and to stimulate and guide the working of their minds, introduces into the professor's preparation and into his classroom procedures that most complex of all variables, a consideration of the student and how he can best learn.¹

It is precisely this variable which creates the necessity for systematic planning of teaching procedure.

To plan methodically is not to plot in detail every aspect of instruction but to concentrate on a few basic questions. Which of the possible ways of teaching this topic are most promising and feasible? What kinds of teaching aids would be helpful and are attainable? What sorts of study or learning experiences would be beneficial to students? What special assistance are students apt to need and how can it be provided? In what ways can instructional outcomes be evaluated? Involve-

¹ "The Madness of Method in Higher Education," *Journal of Higher Education* 22: 90-97 (February 1951).



ment in such planning imposes no commitment to inflexible procedure but makes possible a more conscious design for instruction. It does not inhibit desirable spontaneity, since the latter is sparked more by self-assurance than by temporizing uncertainty.

To an extent instructional planning has to be conducted at long range. Few teachers would commence instruction without envisioning the course in its entirety, outlining a tentative course of study, assembling a bibliography, selecting subjects for special investigation, determining a general mode of procedure, and programming course highlights. As an over-view of instruction this is sufficient, but as each major topic of study is approached more detailed planning—at closer range—is necessary. If a course in Economics includes a unit on the "rise and development of corporations" encompassing several weeks of study, the teacher will find it advantageous to have the unit planned as a whole, centering on such questions as previously suggested. This will not only afford him sufficient time to formulate desired techniques and secure such training aids as may not be close at hand but also enable him to determine more specifically the learning potentialities of the entire unit, the progression from lesson to lesson, and the opportunities for individualizing instruction.

Long-range planning helps the teacher to organize instruction on the basis of large units of subject matter. A single class period is seldom in itself a complete instructional unit: more often it is part of a larger whole, the composition of which is more apparent to the teacher than to the students. Conducting instruction in terms of large subdivisions of subject matter enables the student to operate more intelligently through awareness of the interrelationships of constituent parts, and

greatly facilitates diversification of instructional procedure. The teacher can better determine when to use lecture, discussion, formal recitation, small-group study, individual library or laboratory work, field trips, and at which points to pause for testing achievement and possible remedial teaching.

Some planning on a day-to-day basis is desirable. Plans do not develop exactly as conceived, and modifications may be necessary. It is well, therefore, to review the plan of next day's work—how the juncture with the preceding lesson is to be made, the extent of the new lesson, and some of the details of content and technique. Few things are as exasperating to students as unneeded repetition of earlier instruction or unexplainable gaps in subject matter resulting from hazy recollection of what was previously treated. It is especially advantageous to make a last minute check of factual details, reference materials, technical aids or equipment, and instructional notes. Fifteen minutes devoted to such preparation may make the difference between impressive, workmanlike teaching and fumbling, apparently extemporaneous performance.

Instructional planning takes place in advance of, immediately prior to, and during instruction. Plans should not be so fixed that they cannot be modified or even altered in the course of teaching. An unexpected occurrence—a significant event, an emergent problem in learning, a change in students' attitudes or interests—may affect the value of a prepared plan, making it less promising than a revised mode of operation which suggests itself on the spot. A teacher should take advantage of "targets of opportunity" as they arise, and not feel bound to the restrictions of the original plan. The purpose of planning is to promote the best use of the teacher's resources in instruction, not to hinder or confine him.

Malpractice

"Neither knowledge nor thinking can serve its true function without the other. Each has a value realized only through synthesis of the two. The teacher who does not stimulate the student to think, the college that does not afford the student time to think, is engaged in malpractice." Robert Lincoln Kelly, *The American Colleges and the Social Order*. New York: The Macmillan Company. 1940. Page 330.

Vitalizing Language Learning

Writing after repeated urging and encouragements from colleagues, the author here presented tells modestly how she makes students enjoy the learning of a language. Graduate of St. Mary-of-the-Woods College, with graduate study at the University of Notre Dame and Saint Louis University, and with M.A. and Ph.D. degrees from the Catholic University of America, she is assistant professor of German at Marymount College, Salina, Kansas.

By SISTER M. ALVARITA RAJEWSKI

It is a psychological fact that one dislikes that which baffles our understanding. No one relishes daily or even a periodic contact with something that goes "against the grain." And unless there is some degree of mastery, a feeling of frustration results. This we know to be true not only when the endeavor is on a physical plane, but also when it concerns the powers of the intellect.

This general fact is of major importance when we consider the acquisition of a foreign language. Unless the student's first contact with the language he wishes to acquire is one that gives him pleasure, his attitude may easily become one of "It's all Greek to me," and the delight he might have had in its mastery is nipped in the bud.

In order to prevent such disaster, which it certainly is in the student's life, what would be a good beginning? *Allen Anfang ist schwer* says a German proverb, but still more fitting is the English adage, "Well begun is half done." There has to be a way, then, to get the student to feel a thrill in that first contact with a foreign language which will create in him a desire to master it.

Most students are quite astonished when they learn that there are many language families, and that each of these have literally thousands of subdivisions. Surely, with so many languages, they ought to become acquainted with at least one other idiom besides their mother tongue. They are further surprised to hear that Russian, French, or German are related languages in that they, together with almost all the languages of Europe including Greek, belong to one family, namely, the Indo-European. Russian belongs to the Balto-Slavic division, together with Bohemian, Polish, Ukrainian, and many others. The French, like

Spanish and all the languages which have their origin in the idiom of the ancient Romans, is of the romance language group. And how incredible it seems to them that German and English are sister languages! Their disbelief soon fades away, however, when it is pointed out that some words are identical in both languages, such as arm, hand, finger, ring. Others sound the same but are spelled slightly different, i.e., Haus. And still numerous others are spelled and pronounced just slightly different. When these similarities become evident to them, they are no longer incredulous but believing.

After this introduction the students have been placed in the proper attitude to begin their study. With an audio-visual approach, the objects in the classroom are named. These the students repeat as they hear them, first as a group and then individually. For example, if it is a class of German, the instructor might say, "Das ist der Stuhl," and immediately ask, "Was ist das?" And the class responds, "der Stuhl." As new objects are added, it is necessary to go back constantly, asking at random the names of any or all the objects learned thus far. After a certain degree of mastery, the answer is formulated in a complete statement, i.e., "Was ist das?" "Das ist der Stuhl." It sounds very simple, but the satisfaction that comes with the simple sentence is quite an experience.

The next step is to formulate affirmative and negative answers. To the question, "Ist das der Stuhl?", it is simple enough to answer affirmatively, but the negative reply will take more skill. At first he may merely answer, "Nein, Fraulein Brown (Herr, Frau, Schwester), das ist nicht der Stuhl," and then add the already familiar statement, "Das ist der Tisch." Even the slowest can soon say this long sentence, and how proud they are of their accomplishment.

It is now time to introduce adjectives. Again the approach is audio-visual, as the instructor's desk becomes a demonstrator's table of pairs of articles: large and small, long and short, thick and thin, narrow and wide. "Das Buch ist dick, das Buch ist dünn," says the instructor as he holds up the corresponding book. Incidentally, if you are teaching a language like German, it is also good opportunity to introduce pronouns. To the question, "Wie ist das Buch?", the students may answer, "Es ist dünn." "Wie ist die Kreide?" "Sie

ist kurz," and so on. They have already learned the pattern of a negative statement followed by its affirmative counterpart, so the game continues. "Ist das Buch dick?" "Nein, Herr Brown, es ist nicht dick; es ist dünn." For variety the common colors may now be introduced: red, green, yellow, brown, gray and, of course, black and white. All the various patterns of questions and answers can thus be reviewed with new interest. The questions are lengthened with the use of "or," thus giving additional ear training. The students, knowing several things about an article, have an opportunity to give longer answers in their descriptions. "Das Papier ist weiss und dünn," etc. The instructor's ingenuity will no doubt be able to construct many and varied situations.

By this time the reader is wondering how long this game continues. Is there no text? And what about the grammar? There are instructors who teach an entire elementary course without a text. They, however, have to give abundant notes and explanations which the students have to write in their notebooks for future reference. This takes precious time which might be spent more pleasantly and profitably in gaining facility and fluency in the language. They are also depriving the student of that confidence which even the best students feel at the touch of a textbook. They may be compared to the child who, though well able to walk by himself, feels strong and confident when he can walk with his hand in that of his father's.

The textbook work may begin with the very first days of language study. Aside from what has been outlined in a rather detailed manner above, the students have learned to bid you the time of the day in the language, probably to count, and certainly to understand the various classroom procedures such as going to the blackboard, etc. The transition from the method explained above to a textbook need not be an abrupt one. The inventive instructor will be able to apply the speech patterns learned in the simple questions and answers to the material of the text. For example, if the first lesson introduced the family and the house in which it lives, as is the case so often in elementary texts, the instructor may formulate many questions, such as, "Ist das Haus gross?", and already the student feels at home in the text.

Many instructors advocate the learning of jingles and rhymes to accustom the student to foreign pronunciation. It has its good points, but again I say the time might be used more profit-

ably. Instead of nonsense rhymes, why not substitute *The Lord's Prayer*? Most of the students are Christians, and you will find very few who will refuse to take part. In it you find almost every rule of pronunciation exemplified, and its daily recitation, which scarcely takes a minute, will give ample drill without that boredom of repetition.

Another device which will add zest to your class is singing in the language. Every instructor knows the value of singing in a foreign tongue to acquire fluency and even as remedial work to overcome difficulties of pronunciation. Among the folksongs of a country you can usually find quite a number with charming, catchy melodies, especially those which must have been used for dancing in the village square or out under the trees. And at Christmas time how delighted they are to learn the Christmas carols of the country. A little song at the beginning of the session may bring the sluggish to class a few minutes earlier and, moreover, singing at this time is not so apt to disturb adjoining classes.

Let me give you a word of warning lest some of my readers think that with this start and the students in such a favorable frame of mind, the instructor can relax now and have the class do the work. Unless the instructor keeps on his toes he can easily ruin what has been built up thus far.

I once had the opportunity of auditing an elementary language course taught by a brilliant professor. Here, I thought, I would get the latest in technique, but I was in for a disappointment. This professor could expound admirably in a course of literature but had not the slightest idea of student difficulties in acquiring a language. At the end of the class period he would say, "For tomorrow study the next lesson. Let's get to work or else you'll soon be out of the game, and that's no fun." Little did he realize that the students had no idea what was required of them. Had he spent a few minutes in explanation and dismissed them with a clear idea of what they were to do, both sides of the desk would have profited immensely.

Throughout this paper I have indicated that this method can be used in teaching any language. May I also add that I have no illusions as to its uniqueness. Many are probably using devices that are more effective or at least equally as adequate as the one outlined here. If these have gleaned anything, well and good. However, this paper was written after repeated urgings and encourage-

"Outcome Is a Verbal Preposition"

Books in a "Language Series" are written by college authors "who ought to know." Here is a glimpse of tribulation in the classroom when language and meaning become strangers. The author (A.B., William Jewell College; A.M., Missouri; Ed.D., Stanford) is professor of English at Colorado State College of Education.

By GEORGE G. GATES

For many years now, the fashion has been to teach Giuseppe and Carlotta the parts of speech. If one picks up any popular language series, one finds Giuseppe being asked to learn noun and verb and adjective and adverb. If one visits a school room, one hears Giuseppe reciting these with proud confidence. He says them with an ordered assurance that keeps the world in its orbit. Carlotta repeats them as commandments. Miss Wambetto lives secure in knowing Giuseppe and Carlotta can say the parts of speech. Giuseppe's mother is proud of her Giuseppe; Carlotta's mother is pleased with her Carlotta; the whole community is happy about Miss Wambetto's teaching. The authors of the language series are heralded by the whole professional world; students come from the four corners. Giuseppe and Carlotta are fortunate.

For eight or ten or maybe even twelve short years Giuseppe and Carlotta live peacefully in their language world. The parts of speech are their haven; whatever else they don't know about language, they do know the parts of speech. And in knowing they are blessed. But a Friday afternoon comes, the day for examining the structure of an English sentence in their freshman composition at Delta College, a college devoted to training Giuseppe and Carlotta to be teachers to other Giuseppees and Carlottas. Giuseppe is bored and

happy at the same time, for he knows that the structure of an English sentence is made up of the parts of speech, and though he knows the parts of speech, he would rather be doing something he doesn't know so well. But he is happy in knowing that he knows what the English class is about. Carlotta is thrilled, for she loves to pick out the parts of speech in an English sentence on a Friday afternoon; it is all a part of the easy peace and assurance a school week should end with.

Giuseppe "takes" the first sentence: "The battle won by the infantry decided the outcome of the war." "Battle," says Giuseppe, "is a noun and acts as the subject. Won is a verb; the three principal parts are: win, won, won. And won is the predicate of the sentence."

Carlotta is upset and waves her hand wildly. Mr. Bross stands fascinated, waiting. He looks at Carlotta and catches her troubled stare and asks Giuseppe to continue. "By is a preposition," Giuseppe says assuredly. "Infantry is a noun, the object of the preposition. Decided is a . . ." He hesitates, but begins again. "Decided is a verb; the principal parts are decide, decided, decided. Outcome is a . . ." Giuseppe wishes he were in Miss Wambetto's room; she would at least smile instead of dropping the corners of the mouth as Mr. Bross does. "Out is a preposition," Giuseppe says, feeling his way along. "Come is a verb; the principal parts are come, came, come." He is about to say, "Come is the object of the preposition out and is a noun." But he has said come is a verb. He now thinks of calling "outcome" a prepositional verb. But he has never heard of a "prepositional verb." Next he thinks of saying "outcome" is a verbal preposition. That is it, a verbal preposition, for Miss Wambetto often talked of verbals. Now Giuseppe has the answer. So he says proudly, "Outcome is a verbal preposition." Carlotta is wild with disgust, first toward Giuseppe but more toward Mr. Bross. Miss Wambetto would never permit such errors to pass! Giuseppe finishes quickly: "Of is a preposition; war is a noun and acts as the object of the preposition of."

Mr. Bross quiets Carlotta. Then he thinks to himself: "Good boy, Giuseppe. You have been taught that 'out' is a preposition, that 'come' is a verb. You have stuck to your teaching. I was taught the same thing, Giuseppe." Then Mr.

Vitalizing Language Instruction—Continued

ments from my colleagues mainly to help those who, like the professor just mentioned, may need to take a new view of their teaching. The important thing is that, in this day and age when even some university professors are questioning the place of languages in a general education program, it is possible to teach a language and have the students enjoy it. And who can deny that joy and satisfaction in one's work are important learning factors!

Teacher or Scholar: Whom to Reward?

Professional distinction of any kind, whether as faculty members in teaching and related functions or as specialist and scholar, deserves recognition by the college or university which inevitably shares that distinction. So declares Professor James W. Groshong of the Department of English, Oregon State College.

By JAMES W. GROSHONG

In many American colleges and universities today Socrates himself would be refused tenure for having failed to "publish." In other institutions Plato would win more recognition for effective performance in the classroom or on institutional committees than for the *Republic*.

All this has a ludicrous sound. Yet many in-

stitutions maintain teacher-evaluation policies which lead to this kind of imbalance. Some make publication the sole criterion of the teacher's excellence: the instructor not only must publish a minimum number of research articles to qualify for tenure, but also, having won tenure, he must add to his publications list to earn increases in rank and salary. Other institutions tell the instructor simply that he is expected to do a good job of teaching. Each policy has legions of supporters. Traditionally, "scholars" are expected to support the first, "teachers" the second. Contentious advocates present their cases in the professional journals. Ideally, of course, their arguments should clarify the issue. Yet one wonders

"Outcome Is a Verbal Preposition"—Continued

Bross says, "We may not agree with some things Giuseppe said. But let's have our corrections later. Carlotta, please do the third."

Carlotta reads: "The campus leader campused on the campus campused all those not on the campus." Giuseppe chortles, for Carlotta is not waving her hand. But she begins: "Campus is an a-d-j-e-c-t-i-v-e," she says slowly "and it modifies the noun 'leader' which acts as the subject. Campused, the first one, shows action and tells what the leader did; it is therefore the verb. The second campused is also a verb like the first and is a part of the predicate. The principal parts are campus, campused, and campused. 'All' is an adjective which modifies the pronoun 'those' which acts as the object of the verb 'campused.' Not is an adjective too and modifies the pronoun 'those' because the not describes the those like in 'no soap,' where no modifies soap and is an adjective. [Giuseppe waves his hand madly!] On is a preposition; campus is a noun and acts as the object of the preposition." Carlotta sighs deeply. The bell rings and Carlotta and Giuseppe hurry out the door, bewildered, but certain of one thing: they have a dance date with each other after the game.

Mr. Bross, even Guiseppa and Carlotta in their better moments, wonder about their language series and about Miss Wambetto. Mr. Bross remembers his own bewildered study of language in the language series that taught him the parts of speech. He remembers "his Miss Wambetto" with kindness only, for she faithfully taught the lang-

uage series done by college authors who ought to know. But Mr. Bross recalls his own bitter disillusionment. He had written on the board one Friday afternoon a "list of verbs." His class had copied the list quietly, even proudly, for they thought they were learning something. At least they acted so. Then that afternoon the disillusionment came. He had put sentences on the board illustrating several of the verbs. Without thinking, he supposed, he wrote as the last sentence: "The victory decided in the last speech gave the trophy to the affirmative team." "Decided" was one of the verbs in the list; "gave" was in the list too. He had asked one of the boys, one having difficulty with verbs, to pick out the verb in the sentence. Charles, the boy, beamed when he looked at the sentence. He looked up at Mr. Bross and said with victory in his voice, "Decided!" The "bright ones" groaned; Mr. Bross wilted, ashamed of himself; Charles sank back in his shell.

Out of that experience, Mr. Bross resolved some things. One of the first was that he would never teach his own son the parts of speech. Another was that he would never again in any English class put a "list of verbs" on the board. The third was that he would speak of *words*, not parts of speech, that he would teach words in the sentence as structure groups, combinations, blocks of meaning, the way they are written when they are written well, the way they are spoken when they are spoken well, the way they are read when they are read with understanding.

if up to now the contentiousness has not simply perpetuated an unfortunate schism, and at some cost to simple justice, to the fraternity of teaching, and ultimately to American education as a whole.

► Both policies make convincing appeals to reason. Advocates of the first—some call it the publish-or-else policy—contend that, because the best teacher is the instructor with the most learned, active, and productive mind, and because the only tangible evidence of such a mind is the published results of its activity, therefore publication and good teaching are synonymous. As we shall see presently, this view has its weaknesses. But it is nevertheless true that such a policy attracts creative minds to an institution and at the same time discourages the professionally incompetent and the lazy by placing intellectual curiosity at a premium. Under this policy a teacher may have a visible sign of his accomplishment, whereas otherwise teaching does not often furnish that sign. Stringent though it may appear, the policy enhances the dignity and strength of all education by adding systematically to organized knowledge. Two other advantages, though not often discussed publicly, have considerable importance in many institutions. First, the publish-or-else policy simplifies problems of administration by permitting a dean or department head to make arbitrary decisions about promotion and salary adjustment. Either the instructor qualifies by publishing, or he does not. Second, the policy makes an institution known among other institutions, and may in fact be the most effective means of doing so.

Advocates of the other principle commonly hold that while publication may be an admirable activity in itself, it has no necessary connection with good teaching and is not the exclusive, or even the most important, sign of the able teacher or the learned man. Their arguments usually go something like this. When free of the necessity to publish, the instructor can direct his studies broadly toward the needs of his students and the direction of his curiosity, rather than toward the immediate utility of publication. The instructor who knows that he needs only to perform well as a teacher in the classroom to qualify for tenure and promotion has no divided urge. His chances of avoiding the symptoms of hypertension are greater than those of the instructor under the alternative system. Finally, this policy gives the instructor more time for the real life of the institu-

tion, which is its students, a factor about which the alternative policy is somewhat vague.

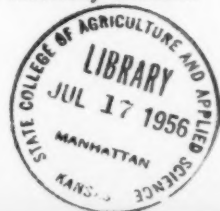
One argument stresses the importance of knowledge, the other the importance of the instructor's relation to his students. Both are impressive. But both also have serious weaknesses. Under the publish-or-else policy quantity rather than quality of publication often becomes the sign of the good teacher. The administrator may, and sometimes does, find it convenient to rank his staff according to the mere frequency of publication or even, alas, according to the number of printed pages. Moreover, and this is a much graver matter, the policy may drive—or lure—the instructor from the classroom to the library forever by forcing him to concentrate either on his personal problem of professional survival or on the delights of research for its own sake. Either way the student is slighted.

But the policy which presumably concentrates on the student and his needs is equally faulty. If the criteria of good teaching are not defined and used carefully in the evaluation of the instructor, the administrator may rely on random reports from students and faculty, on his own observation, or even on what the instructor says about himself. Or he may evaluate the instructor exclusively in terms of committee work, community service, or the seniority list. Accidents, personal factors, and administrator's whim may have decisive influence. Affability may become more important than professional qualifications.

Thus one principle makes it hardly worth the instructor's effort to worry about the quality of his lectures and his effect on students, and the result may be the same routine lectures from term to term and from year to year; student work half read, not read at all, or handed to assistants whose critical judgment is less than mature; and conferences with students, especially undergraduates, begrudged as a waste of precious time that might better have been spent in the library.

The other principle makes it hardly worth the instructor's while to consider a program of active research, and the result may be more and more time spent in advising and conferring with students; cultivating teaching methods for their own sake; serving on faculty committees; acting as a clerk during registration periods; and simply being available in one's office.

► Analyzed in this way, each policy becomes a policy of exclusion, and exclusion appears unjustifiable when the college or university instructor



Evaluating Multidimensionally

The value of out-of-class examinations and some other suggestions for evaluating student performance form the subject of the following concise report of an experimental study. Dr. Blanchard, who holds numerous degrees including the M.A. from both the University of Iowa and the University of Chicago, has served as civilian instructor in the Air Force and in varied educational positions. He has contributed to many periodicals. Two years ago he contributed to this journal an article on "Underlearning and Overlearning." At that time he was a member of the faculty of Plymouth (New Hampshire) Teachers College. He is now superintendent of schools in Kunkle, Ohio.

By B. EVERARD BLANCHARD

Every individual who has ever attended college has opinions about examinations. The usual college examination, which consumes from 40 to 60 minutes, and which is administered at the conclusion of the course, is regarded as typifying the most trying ordeal to which a student should be subjected.

The construction of a good test is not a task that can be carried out in just a few hours, or by copying passages from pertinent texts. This statement, although endorsed by many competent professors seldom finds a place in actual practice in our institutions of higher education.

We have approximately 2,839,000 students enrolled in institutions of higher education. One final

examination per student means that some 2,839,000 man hours are currently utilized for course examinations. Since the typical college student usually takes four courses per semester, this could mean 11,356,000 man hours consumed for one final examination for four courses. Expressed another way, this means that each year in institutions of higher education approximately 1,296 years of time are taken administering examinations to college students. With the expected expansion of enrollments in the years ahead, the time consumed by final examinations—not counting other examinations, could be 1,800 years.

Recognizing the importance that professors attach to the usual end-of-the-course, or traditional examination, the writer's purpose was twofold: (1) to investigate the relationship between the end-of-the-course examination, a dual examination, and out-of-class examination, and (2) to determine whether the importance usually attached to the end-of-the-course traditional examination is superior to that of other examinations which might be utilized.

The students cooperating in this study were enrolled in "Principles and Practices in Secondary Education" classes taught by the writer during 1953-54 and 1954-55 at Plymouth Teachers College, Plymouth, New Hampshire. Of the total number participating, namely 48, 20 were females and 28 were males.

The media used in this particular study consisted of three examinations which may be described as follows: The first test administered to

Teacher or Scholar—Continued

is hired on the assumption that he is to meet classes regularly and maintain a working familiarity with a subject matter. No teacher-evaluation policy is fair which excludes consideration for any kind of performance expected of the instructor. If his job requires that he have special knowledge, then he should be recognized for distinguished contributions to that knowledge. If his job requires that he teach students in a classroom, then he should be recognized for distinguished performance in the classroom. And if his job requires that he act on institutional committees or do special work in the community, he should be rewarded for distinction in these activities. Professional distinction of any kind deserves recognition

by the institution which inevitably shares that distinction.

Ideally, therefore, the instructor looks both ways, toward a field of knowledge and toward the classroom. He studies and thinks and carries the product of his thought to students who share it with him and direct him again to his studies. The process continues. From that process come many byproducts: books, articles, plays, short stories, speeches; plus all the unpublicized work that goes into the solving of institutional problems and the sharing of the life of the institution with the community. The instructor who makes distinguished contributions anywhere along the line deserves official recognition.

the group consisted of a dual examination whereby two students picked by the instructor worked together cooperatively during the class period; the second test was completed out-of-class by each individual, and the third examination was the usual end-of-the-course test taken individually by each student in class.

The content of each examination covered simple recall, completion, constant alternative, changing alternative, matching, analogy, problem solving, and critical thinking items. An attempt was made to make the three tests as nearly equivalent as possible. Each of the three tests was administered to the group once every two-day period. The length of time taken to complete each test was identical and approximated sixty minutes.

After the course in "Principles and Practices in Secondary Education" had been presented for some sixteen weeks, the students were given the traditional (end-of-the-course), the dual, and out-of-class examinations.

An analysis of Table 1 reveals that the range, mean, and the standard deviation of the traditional versus the out-of-class examination are approximately equivalent.

The reliability coefficient obtained for each of the three tests ranks the out-of-class examination somewhat superior to the dual and traditional examinations.

Table 2 indicates the correlation coefficients between the three tests. As will be noted, an $r = .89$ was obtained when comparing the traditional versus the out-of-class examination. Furthermore, the correlation of $r = .74$ between the dual versus the out-of-class examination appears to suggest that the latter examination is superior to the traditional examination.

CONCLUSIONS

Apparently, college students taking the final examination out-of-class with no proctor in attendance can achieve the same and in some cases better scholastic marks than those college students who are confined to the classroom under the direct supervision of a proctor.

The instructor who attaches one-third, one-half, or more weight to the traditional examina-

TABLE 1
COMPARISON OF RANGE, MEAN, STANDARD DEVIATION,
AND RELIABILITY COEFFICIENTS OF TESTS

Type of test	N	Range	Mean	δ	Test reliability ¹
Traditional..	48	77-139	104.3	3.04	.79
Dual.....	24	74-118	93.8	14.50	.75
Out-of-class	48	75-147	104.0	3.10	.83

¹Kuder-Richardson Formula.

TABLE 2
PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN
TESTS

Type of test	r
Traditional vs. Dual66
Traditional vs. Out-of-class89
Dual vs. Out-of-class74

tion taken in class relative to determining the final semester mark may actually be penalizing the student unintentionally. As a matter of fact, much of the graduate level work carried on in reputable institutions of higher education is not concentrated on the lectures given in class so much as on the work assigned and accomplished out of class.

This study seems to suggest that the values frequently attached to the traditional end-of-the-course examination taken in class may be seriously questioned. If the same, or better scores can be achieved by an out-of-class examination, some 11,356,000 man-hours of class time currently used each year could be converted to better utilization.

This particular investigation afforded the instructor the opportunity to view three different patterns of learning carried on by the participating undergraduate students: (1) the student's ability to work cooperatively with other students in solving problems; (2) the student's ability to work independently, and (3) the student's ability to work creatively out of class on projects either initiated by the student or assigned by the instructor.

Thinking as a Fine Art

In the following article a thinker shares with us his thinking on the art of thinking. Ordway Tead (A.B. Amherst; LL.D., L.H.D., Litt.D) has contributed generously to this journal by submitting articles for its pages and in less conspicuous but even more important ways. He is editor for Harper & Brothers and vice president; he has been chairman of the Board of Higher Education, New York City, and is currently chairman of the board of trustees of Briarcliff Junior College. He is a member of the faculty of Columbia University. His writings include many books and articles on education, management, and related subjects.*

By **ORDWAY TEAD**

We have to ask ourselves what thinking is; and in relation to this I would like to say a word as to what a fine art is, because I think the two may be woven together in the kind of experience and deep satisfaction of thinking which is a possibility. I shall use several words synonymously—the words thinking, reflection, reasoning, deliberation—all to mean the same thing as far as what I say here is concerned.

Thinking is the conscious effort to relate the activities of life to some understanding of its what, its why, and its how. Thinking is the effort to confront our desires, our feelings, our drives, our goals, the demands upon us, the tensions, the conflicts—the effort to confront all these in some rational way leading to a better resolution of living, a happier outcome in ongoing experience.

What is a fine art? Isn't it this—the recognition of the importance and need for design, for form, for selection, for insight, for vision, for communicative skill, and ultimately for acceptance? If we can wed the reality of critically confronting life's problems, which is reasoning, with the artistry of the passion of trying to do a lovely job of living, we will have added immeasurably to the stature of our own ability to live effectively and to be kindly human persons.

I shall at the end mention some of the important influences on the side of irrationality, and include also a word about "the cult of irrationality" that is abroad in the world.

* Because this paper, originally given as a speech, was sent to the editor as delivered, the usual footnote references of credits to other authors were omitted and have not here been added. O.T.

Meanwhile, I am going to talk about these four things:

- ▶ the reasons why thought is a fact
- ▶ the nature of the thought process
- ▶ how the thought process is carried on
- ▶ how we may foster and influence it for ourselves

WHY THOUGHT IS A FACT

The human brain—I wish I could elaborate more adequately—is without qualification the most wonderful, the most significant, the most mysterious, the most uniquely human manifestation that we know anything about. Its internal functioning—how it works, we know only slightly. We know more about the outcomes. Where there is an organ—any part of our organism—that has not only survived but has also developed and is capable of greater development, the assumption has validity that there is a necessary function. There is some reason why it has been called into being and continued to operate.

We are possessed of a mental equipment which enables phenomenal things to have occurred in the history of the human race. And no other example of life has anything like it in quality, degree, intensity, and good results. It performs functions dealing with problems of choice, the satisfying of our needs, the efforts we have to make to express our deepest selves on various levels of our living, the ultimate aspirations we cherish. Perennially as individuals we confront problems, some important, some trivial, some having to do with our own internals, some having to do with our relations with our immediate associates, and some more cosmic in character, which as posed in courses at college have to do with general political and philosophic considerations.

Why does one have to bother with thinking? Can not one just coast along? Yes, one can—perhaps pleasurably on the whole. You say, I don't want to be an egg-head. Yet if you take that view and follow it through with consistency you may come out in another few years the human counterpart of the oyster. The oyster is a splendid example of the adaptation of the organism to the environment. It is in the mud, it sticks there, it survives there, it nourishes there, it asks no questions—except not to be disturbed. But Leonardo and Plato, Edison and Einstein, Michelangelo and Albert

Schweitzer—I could go on indefinitely—are instances of the stature, in various walks of activity, to which the human mind can soar in its creative, formative effort to confront this “blooming, buzzing confusion” which is the world.

Ideas—the results of thinking—ideas *do* have some influence in changing the outcomes we can get in affairs and in our surroundings as a result of deliberation and reflection. Someone has said that nothing is so powerful as an idea which has come to its moment of wide acceptance. That was true of the American Revolution, just to take one instance. Nothing is so powerful as an idea shaping the whole direction and destiny of the pattern of events.

THE NATURE OF THOUGHT

The nature of thought is manifested in several directions and at several levels. It can be completely detached and disinterested. I shall start first with the large and go down to the smallest. Contemplation and meditation insofar as they have some focus of ideas are one direction of the activities which can be thinking. The theorizing which has built up algebra, geometry, trigonometry, the calculus—all of that is the effort to use the mind in ways dissociated from the raw material of experience—the structuring of certain premises into certain conclusions, which have resulted ultimately beyond pure creative speculation in later applications of profound public significance.

Ordinarily the nature of thought is the use of words more or less effectively as tools within our own minds. Stop to think about it—be a little self-conscious—you will discover that we have to use words to give us a helpful prior rehearsal to alternatives in possible conduct. I think to myself: now which of these courses of action had I better pursue? Such prior rehearsal supplies a valuable economy in the way human life is conducted because it means that we do not run off in too many directions at once, making too many needless experiments to determine what is sensible and wise to do—not too much of “trial and error.”

In one aspect the nature of thought is thus the exploration of possible outcomes of choices of behavior. Then again it is—and this is terribly important and often not appreciated—the effort to criticize, to get a sense of the value of that which has already transpired. It is the critical review of the outcomes of the experience, of the choices we have made among some particular alternatives.

People are disposed to think of the effort of thought as being so dry, so impersonal, so unattractive; yet always thought is prompted by, related to, derived from feeling, desire, need, or purpose. In a sense which I am not even going to try to qualify, there is no such thing as “disinterested” thought. Thought is always interested—otherwise it would not occur. It has to do with outcomes in experience even when it is contemplation; meanings are always being emotionally felt and realized. And the passion—whether it be for the scientist a passion for truth-seeking and truth-discovery, or for righteous living as with the saint—is a burning one. The purer the thought, the purer the passion; and the more moving the feeling, the more vigorous the thinking.

At the other extreme, which all of us know if we are honest with ourselves, is the effort to use our thought to justify what we have mistakenly done or what we wish to do on the poor evidence of unrestrained impulse. This is what we call—and the word should be incorporated into everybody’s vocabulary—rationalization. Rationalization is an important aspect of the way in which we misuse our minds—to justify what we want without first examining the evidence as to the probable wisdom of its acceptance.

Another qualifying thing about the nature of our thinking is that each of us approaches his problems influenced by what I call his preconceptions—by certain presuppositions deriving out of one’s background at home, in education, in total cultural experience we severally have had. If I suggest such words as property, marriage, success—every one of us would have something a little different to say about our connotations for those abstract words, because of our preconceptions as influenced by our past experience.

Another aspect of the nature of thought which is not appreciated as it properly might be is that thought is a *social act*. The occasions and provocations of thinking are predominantly occasions of human relationship, of understanding our adjustments to a world of people and of nature, of awe and reverence in the confrontation of mystery and Being. The origins of the problems with which the mind has to deal are also social in character. The data we employ as the subject matter of our thinking are largely social in character. What, for example, is a library? A library is an organized, systematized assembly of recorded thoughts, ideas, materials, data, accumulated

through history, where we have access to information, insight and inspiration relevant to questions which we desire to have light thrown upon and get a solution or answer to.

There is, in the International Business Machines Company, a slogan which has come down through the years. It is also the title of their company house organ. The slogan is "THINK"—and they have "THINK" signs posted up around their plants. Yet there is no such single detached reality as "think." There are always confrontations of each of us with a great variety of problems which ongoing experience presents. You do not think in a vacuum—you do not sit down and say: "Now I am going to think." There must be something urgent to think *about*—some issue either someone else has confronted you with or you have confronted yourself with. And any advice from anybody "Oh you must think harder" is inept and irrelevant; nor can you be much influenced solely by such a plea. We have all to be encouraged toward the art of thought by the acute awareness of inner tensions.

If, for example, I say to you "I think the problem of the Republican nomination in '56 deserves reflection on the part of the voter," then you have something to think about, something about which we can go and get data as to the relevant evidence. The exchange of thought, the fertilizing of thought, the advancement of thought—these have always been a social effort as I suggested by mentioning the great institution of a library—one of the most ingenious devices for the socializing and the cross-fertilizing of the mind of man.

And then we have something today which you will no doubt encounter in certain courses. It is a new phrase for an old fact—and it bears the odd title "group dynamics." It means basically that there is the possibility of improved techniques in experiences of group deliberation and consultation. When a few people gather, they may deliberate to greater advantage if certain strategies and techniques are employed. All this is important and worthy of scientific analysis. It is dramatic evidence of the fact that thinking is a social process. And hopefully one of the things that college ought to do is to enable one to realize this social factor, to capitalize on it, to be able to deliberate in common in shared thinking to better advantage in terms of productive outcomes. However, this needs to be said about group dynamics. You cannot raise the total problem-

solving capacity of a group of ten people higher than that contribution which some one of them makes or distills or integrates from combined ideas. With a mature and good leader in a group deliberation, the chances are improved that something valuable may come of it. But a purely verbal exchange together of unimaginative mediocrity never gives rise to wisdom out of group discussion.

THE PROCESS OF THINKING

Next, as to the operation of the process of thinking. I am certain that if an individual—man, woman, or child—will get five or six words clearly into mind, hold them there through life, and apply them persistently to problems, the capacity and the outcome of our individual thinking effort on ordinary experiential problems would be vastly elevated in quality.

What is the problem? Define the problem, ask the right questions. That is not so easy. With personal affairs, let me assure you, one of the things that gives rise to psychopathic situations is our refusal to ask ourselves sometimes the right questions about ourselves. It is easy to ask them about foreign affairs; but we hate to confront personal reality; and therefore we do not in respect to personal things always ask ourselves the searching questions and pose the problem in the most penetrating way. It has been said again and again, and it is sound, that a problem well stated is already essentially half-solved.

You have next to assemble data. You prepare—you immerse yourself in material about your problem. If you want to be concrete about some problem by way of example, think of it in terms of writing a paper for a class, and you will see what I mean. Identify the problem; make a clear statement of it; continue your preparation by assembling relevant material which will help toward the solution (which in this example is a ten-page finished theme or thesis).

Then you take the data—those of you who are in science can relate what I am saying to the scientific effort and methods of the natural scientist—and classify it in some way to get a more significant sense of what the problem is—get the clues as to what the answer is going to be. And then you make a guess—or you make scores of guesses—and scores of tries as to what the answer is. You can, indeed, make as many wild shots in science as you have the patience and ingenuity to try. Do you know why the famous former

treatment of syphilis was called "606?" Because the man who finally got the 606 formula said he had done 606 trials of combinations of chemicals before he hit upon the one which proved to be a therapeutic agent in relation to this particular kind of affliction.

The next step after problem statement, preparation, accumulation, analysis, hypothesis—or a step during several points, really—is one we may call incubation. This means letting the mental material stew in its own juice. In common sense parlance we sometimes say—"I want to sleep on this"; and sleeping on a problem is often good. There's a mystery about this too. We do not know what happens, but often clarity and an insight that resolves confused issues emanate out of a night of sleep, or out of a walk alone or from a complete shift of attention to something else. Incubation means relaxation—turning away momentarily from the pressure of the problem-solving effort. You cannot rush it; you need the refreshment of a certain leisure if the best results are to be obtained.

Also each person has to know his own daily rhythm of creative cogitation. This is important. I, for example, work best in the morning from 9 to 1. In the summers I consider it a privilege to go off into a quiet place and write until lunch time. That is my rhythm, and I can habituate myself to that in a way that hopefully may have some productive outcome. Other people work better in the afternoon, others in the evening.

There comes finally the testing of the solution, the verification, the seeing whether the end result agrees with the known facts, with the observed experience, achieves some correspondence as to what we believe to be reality.

These several successive steps are what reasoning is. They suggest how one can guide one's own mental efforts to make reflection more effective. The five helpful words toward one's attack on a conscious pragmatic thought process are, therefore: recognition, preparation, incubation, illumination, verification.

What next are the tests of the validity of the process? These questions I think are suggestive: Is the solution *appealing* to one basically? Is it *inclusive* of all the factors to be taken account of? Is it relevant to the situation confronted? Does it *unify* the conflicting tensions of one's experience? Has it been in some measure *cooperatively* achieved? Has it been tried and found to *correspond* with the realities, and is it confirmed in subsequent activities?

Another thing that you must have observed is that there are people—some of our great scientists are interesting examples—who in a special field have trained themselves to a most skillful employment of the reasoning, deliberative, scientific process. Yet take them out of that field into one where they have not been so familiar with the necessary data and their utterances and conclusions become naive, to say the least. What does this fact mean? Only this; and this is a great deal. The steps in the attack upon thinking as a process are applicable, given desire, to *every* area of problem, with slight variations, depending upon whether you are primarily having to use inductive or deductive approaches. But if a scientist is using such methods in his laboratory only, and he beats his wife and does other strange things outside and irrationally in his private life, the reason is that he has never learned the true universality of the method he has been trained in his laboratory to invoke and use to good advantage.

What I would urge, for every person who is trying to get an education, is that one should try—and teachers should help—to see how it is that scientific methods are to be utilized in every field of thought and action so that one becomes able to be rational in more than just one little limited area of knowledge and experience where one's specialization has occurred.

A further word has to be said, although I am sure it is familiar, that there are several—at least three—basically different ways of attacking problem-solving. There is the cumulative method of starting from somewhat kindred facts and looking toward a conclusion to be reached and tested—the process of induction. There is, second, and significantly and increasingly in the physical sciences—the exact opposite process where you start from a hunch, from a tentative statement of principle or hypothesis—from a postulate—from a notion that some brilliant mind has obtained, and then try to corroborate and confirm that by measurement, observation, and other evidence. You know, and with as much concreteness as I do, the great Einsteinian formula E equals MC^2 . I believe this was enunciated in 1905: "Energy equals mass multiplied by the square of the speed of light." It was that formula derived by postulational thinking—derived purely deductively by Einstein—which enabled all successive experiments to go on, which led to the fission disclosures in atomic research.

And then one has to acknowledge, I think, that

there is something called 'intuitional' thinking. This is, perhaps, the despair of men since we know little about it. But I am sure it exists among women, and it shortcuts some of the more formalized logical processes which men's minds seem to have to go through. It has to do with a kind of immediacy of awareness and grasp which is surely a reality and notably in the aesthetic realm.

On this question of the process, Whitehead made the penetrating observation that the greatest invention of the 19th century was the invention of the idea of invention, the method whereby we carry through the deliberative processes and apply them in action most notably to material needs, to manufacturing problems, to industrial research efforts of the greatest variety. This has truly been at the root of our extraordinary technological and productive abundance in the last century. It derives from our ability to take the laws of creative thinking, which embody the "laws" of invention, and apply them in all sorts of fields for material control.

FOSTERING THE THINKING PROCESS

Next, how can this all be practically fostered? If there are several steps which constitute a succession of processes, what can we do individually to make us more acute and successful? First I think it ought to be said in all fairness and honesty that the endowment with which we approach problem-solving does innately differ among us. You are familiar with the phrase "the bell-shaped curve." It is fairly well established scientifically that the distribution of intelligence in society from person to person is described on a curve which is the bell-shaped curve. Most of us fall in the middle or C situation; there are some over in the A areas and some way over toward D and beyond to the moronic area. And beyond a point it is true that one cannot exceed one's native grasp in problem-attacking.

There is a certain givenness there. Yet there are many other things that can be done to compensate for an average quality of problem-solving acuteness and penetration. Let me suggest a few: one's physical condition is important—tired people have tired minds. Variety is important. The reason you travel, for example, is to get a little variety in the data, the pabulum with which your mind works. Novelty, adventure, a shift out of the rut, these are often good for thinking, however you achieve this in your own individual pattern of life. Get out of the rut. You must also have no

distractions while the thought process is going on. You mislead yourselves, you do not know your own physiology, if you think that when the radio is blasting in your ears you are able to think better than under quieter conditions. It is not so! Reflection requires quiet; it requires concentration; it requires absence of distraction and the relaxation of leisure. Again, as I suggested above, regularity of attack and effort is helpful to thinking. If one has a certain chair and desk, a certain time, when one goes at intellectual effort, that regularity is soothing and helpful to the total mobilization of mind, body, and spirit for problem-solving.

The following couplet of Matthew Arnold's has a certain truth:

"Tasks in hours of insight willed
Can be in hours of gloom fulfilled."

This again takes account of the rhythm situation. If there is in times of mental vigor persistence in the formulation of the problem and the effort toward it, then we can in the moments of our lesser effectiveness go on with the striving for its solution.

Also, and the writing of a thesis is again an illustration, in the thinking process one should make it a habit to write down at once what comes to mind—take notes of your own momentary ideas, because they come spontaneously and they go, and they will be forgotten. Some of your best ideas may leave you and you will wish you had them just when you have not had the patience and taken time to write them down for later use.

THE PROBLEM OF IRRATIONALITY

A concluding word is in order about the problem of irrationality. In any society where an authoritarian government has attained the position of being a totalitarian government, there is no premium upon universal individualized thinking. There the people who think, who are charged to do important problem-solving, are those in control of the totalitarian situation. And the whole trend, therefore, at work in such a world unhappily is to let the so-called "elite" do the thinking—which quickly becomes one of the subtle anti-rational influences in such a world.

It is accentuated, also, in a certain type of philosophical writing which I shall identify as one school of existentialism. Existentialism of one variety is a European (and often French) philosophy in which rational methods are employed to prove that there is no ultimate, intrinsic, and cos-

mic rationality. Such existentialists rationally invoke the mind to assure you that there is no reason and no meaning in the effort of any human striving—only a stoic acceptance and grim determination to cope with living.

And then finally on this score of threatened acceptance of the ultimacy of irrationality, one has to ask which areas of thinking are you concerned with? Are you thinking in the realm of *mechanical* science or are you thinking in the world of *organic* science? The two have different methods and they seem to come out with different answers. And I agree with those who say that if we continue to pursue a mechanical, deterministic science method exclusively, and apply it alone to affairs of the human organism, these become incomprehensible.

If you conceive of the human animal as an organism with innate powers of direction, powers of purpose defining, powers of goal seeking, powers of emergent growth and striving for maturation and self-actualization—if that is the view you are willing to take, then you can begin to cope with the rational effort to seek to establish a science about people. But it is a science of people as organisms, of people with dynamism, with freedom, with growth potentials. Such a

rational premise, and that alone, gives meaningfulness ultimately to the scientific effort and inquiry as it applies to humans. We are not automata; we are not robots. We are possessed of a reality of freedom for the exercise of which minds are given us. And if we will follow the suggestions of the methods of rational thinking and be persistent about them, good results are freely possible in both personal and social outcomes. The cult of irrationality is at long last the cult of futility and fatuity.

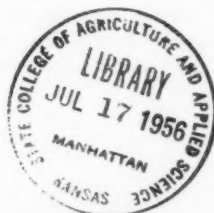
THE CREATIVE POTENTIALITIES OF CLEAR THINKING

The President of Antioch College has this to say about the problem of thinking: "Somewhere among the youth of today are minds capable of discovering ways to world peace; ways to deeper and more fulfilling lives; ways to new appreciations of beauty in art, literature and music, just as there have been minds capable of splitting the atom."

"Ours," he adds, "is the task of breaking the thought barriers which keep all of us as young people from realizing the creative potentialities of clear thinking."

He Creates by Living

"The course of life is, in a way, comparable to a work of art which one creates, shapes, and perfects by living it, and, if one is fortunate enough, one may even put the finishing touches to it. The person may be only vaguely conscious of this, but it still seems that the life history, the work which he creates by living it, is his greatest concern." Andras Angyal, Foundations for a Science of Personality. New York: The Commonwealth Fund. (Harvard University Press, Cambridge, Mass.) 1941. Page 354.



Teaching and Egotism

The following article points out that teaching presents some peculiar ego hazards that affect everyone in the profession. The author is a graduate of Quincy College and earned M.A. and Ph.D. degrees at the University of Illinois. He taught in high schools, was two years at the University of Nebraska, and for four years has been on the faculty of the State Teachers College, Minot, North Dakota. He has published articles in several educational journals.

By ROBERT L. COARD

Of course, there is nothing wrong with being egotistical within limits. As the wise Oliver Wendell Holmes said of conceit, "... it is like the natural unguent of the sea fowl's plumage, which enables him to shed the rain that falls on him and the wave in which he dips. When one has all the conceit taken out of him, when he has lost all his illusions, his feathers will soon soak through, and he will fly no more."

Probably the teacher needs the protection of conceit more than most people because he deals so much with intangibles and imponderables. He may have to wait a decade to check certain results and even then he cannot be sure whether he is entitled to any credit. He also needs to be electrified with more than the average share of self-esteem because he discharges so much into non-conducting material. Part of his audience is always indifferent to his words; a few may be actively hostile. In order to achieve success he at least must be convinced that what he has to say is important. It follows then for him that he is a speaker worth listening to. Some egotism of this kind, if it deserves such a harsh name, is indeed essential.

On the other hand, just as injuries from falling rocks and cave-ins are numbered among the risks run by coal miners, so is a grating egotism, an attitude of hardened self-esteem, one of the occupational hazards of teaching. A variety of causes contribute to this unfortunate result. For one thing the teacher generally has the advantage of age and long familiarity with the subject. He has been over the material ten, twenty, or even a hundred times. By contrast his students may be making their first acquaintance with the data. They hesitate and falter. Sometimes the teacher

cannot honestly comprehend why this should be. All too often, perhaps almost inevitably to a certain extent, he is inclined to attribute his success to superior mentality when it may have been nothing but simple experience.

A second cause of egotism in the teaching profession is the constant flattery, conscious and unconscious, of the students. To his colleagues a given teacher may be a cantankerous bore; to his wife he may have been a sad alternative to spinsterhood; but to his students generally he is the man who knows, the arbiter of disputes in a specific field, and—possibly deserving the order of climax—the giver of grades.

Students are not fools. They know what side their bread is buttered on and are quite ingenious in locating the teacher's weaknesses and making the most of them. Even the greenest freshman has been dealing with teachers for some twelve years and is not so green as he seems as he goes about his tasks of holding doors open and wreathing his face in pleasant smiles. No wonder then that synchronized laughter, one of the most insidious forms of flattery, rings out so shrilly in college when the teacher makes a jest. Goldsmith's words have their relevance to all levels of education:

Full well they laughed with counterfeited glee
At all his jokes, for many a joke had he.

But continued laughter of this kind probably is not so dangerous in its effects on the teacher as the general docility of the student body. This docility provides a standing temptation for a teacher to foist his ideas upon the class in controversial matters; for often they have no ideas of their own since they are becoming aware of the problems for the first time. Then, too, many older students will seemingly accept the teacher's ideas, remaining silent for fear their real opinion will cause their grade to suffer. From my student days I can recall an individual in one class who had in his notebook a drawing of a barn door with an enormous lock on it, graphic advice for him to keep his mouth shut since the expression of a dissenting opinion could harm his grade.

"No mortal," writes Goethe in *Wilhelm Meister*, "but is narrow enough to delight in educating others into counterparts of himself." Every teacher must wrestle constantly with this pedagogical lust, this intense desire to create

others in his own image. Teachers whose avowed purpose is to instruct students "how to think" are particularly susceptible to its blandishments, for to the outside observer it seems that they should add to the first phrase a second, "like me."

These are but a few of the risks of having an assured and submissive audience. Other more subtle and perhaps more widespread damage may result from having captive listeners to whatever one has to say. Most males can vividly recall how during their courtship period silent female appreciation reduced them to depths of asininity. Now this admiration shown by the class, feigned or real, though it may not be so intense as that of a courtship period, is on a far larger scale, more permanent in duration, and ultimately more erosive of common sense. On the golf links or on the sidewalks few people can hold a listener for more than a few minutes before he has the bad taste to reply, but in the classroom the teacher is assured of a fifty minute run any time he chooses. And sometime during the course, generally about the period of the final examinations, a fair portion of the class will tell the teacher that this was their most valuable course in college. Or consider the havoc that is wrought on a teacher's insides by a summer classroom full of aging matrons and maidens who go searching for *bon mots* with appreciative titters and acclaim the slaying of intellectual dragons with worshipful sighs. Few can come away from such treatment unscathed.

There is something too about the routine of the teaching life, the long hours spent indoors, the concentrated paper work, the everlasting sitting at a desk, the endless committee quibblings, that breeds an unhealthy egotism. Emerson may have had similar things in mind when he wrote his chilling description in *Representative Men*: "The studious classes are their own victims; they are thin and pale, their feet are cold, their heads are hot, the night is without sleep, the day a fear of interruption,—pallor, squalor, hunger and egotism."

The possibilities of acquiring a blimp-sized ego, of course, are not by any means limited to teaching. Henry Adams has taken in other professions with his acid observation: "No man, however strong, can serve ten years as a schoolmaster, priest, or Senator, and remain fit for anything else. All the dogmatic stations in life have the effect of fixing a certain stiffness of attitude forever, as though they mesmerized the subject."

There seems to be little point in denying the

existence of the risks of egotism in teaching. Images of certain casualties come to mind in the form of old professors who are no longer capable even of passing a few incidental remarks on the weather. Instead they must lecture on it.

Harmless and amusing as are some of its manifestations, uncontrolled egotism can obviously destroy a teacher's efficiency. Recitals of monotonously recurring successes are likely to create an unfavorable student attitude, not only toward the matter immediately at hand, but also toward the entire subject area. In addition any original well thought out plan of instruction will vanish in a flood of narratives of triumphant research, assorted travel stories, childhood reminiscences, boastings of the achievements of former students, meandering political commentary, and unclassifiable ramblings. Again if a teacher is too satisfied with his achievements, he may abandon study, permit his critical faculties to decay, and ultimately meet intellectual death. Saddest of all sights is that of a teacher building up his own ego by showing up the innocent ignorance of class members.

Adams' dictum would indicate that the only remedy for the risks of the teaching trade is flight. Actually something a little like Adams' idea is being tried in a college or two by which teachers spend their sabbatical leave in other occupations rather than in the conventional ways. The experiment, however, does not seem to have been conducted on a sufficiently large scale to warrant any conclusions. It would seem to have a number of advantages though. Those teachers who have long played little afternoon coffee hour games conjuring up cigarette visions of what they would have accomplished if an unkind fate had not thrust them into teaching would have a chance to have their fling. The Spenserian scholar at the gas pumps might acquire a new self-reliance. Fanciful as it would seem at first glance, certain occupations dealing directly with the public such as managing a restaurant or clerking in a hotel would be admirably suited to dissolve layers of starchy dogmatism accumulated through years of teaching. For the most desperate cases desperate measures might have to be resorted to. Those teachers who have been too long in administrative posts would probably have to be employed as carryout boys at supermarkets to acquire the proper ego deflation!

Though not as efficacious as occasional work in other occupations, vacations too can play a part

Between Periods

A professor "between periods" sometimes has pithy thoughts that are worth jotting down. In a preceding issue we presented a set of such reflections which we are now happy to continue. We are to think of Professor Withers (A.B., Washington and Lee; M.A., Johns Hopkins; Ph.D., Pennsylvania) giving some of his detached thoughts on many topics that have come to his mind between his English and foreign language courses at Virginia Polytechnic Institute.

By A. M. WITHERS

• The Eternal Handicap . . .

If all those contributors to the professional-education magazines who occupy themselves with mighty urgings to teachers to lead their students upward in the ways of culture, and all those who write articles and books on methods and objectives, will keep their feet on the ground for a while and study diligently the eternal handicap of insufficient language capacity, they will be much better motivated in their laborious efforts to leaven the educational lump.

Teaching and Egotism—Continued

in lowering the temperature of a fevered teacher ego. In the narrow campus life Professor Thunderer may be living on his cheaply acquired legend which causes all his graduate students and some of his undergraduates to tremble, but in another city he is just a queer-looking old fellow with glasses who has to open his own doors and wait for his turn to talk. Greater attention should probably be paid to a rotation of summer school classes among staffs since these are the most corrupting. Paying proper heed to diet and exercise including an occasional walk to some vantage point above the college to show that it does not take in all the horizon is another measure calculated to reduce the tender, distended pedagogical ego.

The transferring of teachers temporarily to other occupations, the spacing of vacations, and similar measures can never furnish more than a partial answer to the problem of the swollen ego. In a majority of cases other work might not be practicable, and in a few it might be wasteful of great natural talents. For the most part as always the individual will have to work out the solution

• Not all, but too much, is vanity . . .

Most (perhaps) of our educational administrators and our teachers have been boys and girls sitting on the same benches that they now overlook. They are themselves products of a schooling that has been un-uniform, not to say, at times, somewhat chaotic. Thus the whole educational mechanism may look sometimes like a circular treadmill (if that is not stretching a comparison). Administrators are often in no authentic sense schoolmen. Not possessing a broad general education many of them are in self-defense aggressively self-assertive, deriving such faith as they have from unreliable statistics, and from educational studies destined for musty archives. The spectacle is often presented of pulling in opposite directions within a local area, to say nothing of wider sweeps. Yet most Americans are convinced, because the wish is father to the thought, and because so many administrators, basing their constructive ideas mainly on mechanical equipment, make the claim, that ours is by long odds the best public school system in the world. As a matter of fact, would we not do well to bury some

by himself. The first and most necessary step would be a realization that teaching presents some peculiar ego hazards that affect everyone in the profession. Aware of these dangers a teacher needs to find some way of taking his soul in at frequent intervals for spiritual dry-cleaning. The method Bliss Perry's father suggested to him of treating every student by the same standards one would apply to a guest in his home is probably as good a single rule as any to follow. The asking of several simple questions during class time might be helpful. Is what I am saying relevant? Am I talking too much? It really does not matter how brilliant or intrinsically valuable one's remarks are, if they are too long sustained, they are not going to get through. Some effort must be made to find out what the students are thinking. The therapeutic value of another voice in the classroom is immense.

For those teachers who unfold glowing accounts of the enthusiasm and learning of their classes under their inspired leadership a ready method of ego reduction is available. Administer a test and grade the results.

of our vanity and study the practices of some educationally wise, experienced old countries of Europe?

• **What have you done with your language?**

Somewhere it is written that the Lord does not ask who we are, where we live, what our color is, or even what our special religion; that he asks us rather *what we have done with the land which he gave us*.

We know what many do with that land. They deprive it of its fertility. They let it be washed away. They make it ugly with ill-fitting structures. They clutter it up with tin cans and glass bottles.

Might not the Creator ask with equal concern and equal justice: "*What have you done with the language which I gave you?*" The analogy is clear when we reflect that not half of our students in college know the meaning of "mortal" in "Men are mortal," or of "corporal" in "corporal punishment."

• **We and the *Mona Lisa* . . .**

Morality cannot be "talked" into one. Neither can music or art appreciation. You cannot put weight upon a gossamer bottom. To comprehend the spirituality in painting, sculpture, architecture, music, a considerable degree of mental maturity is necessary, together with a strict apprenticeship in the fundamentals of those arts. Witness the words of an American recently in Paris: "Have I seen the *Mona Lisa*. It's not so hot."

• **Let's be careful with our prejudices . . .**

We Americans as a whole rather looked down upon the Italian immigrants who poured into our country as day-laborers during the unrestricted years. But those people brought with them something that we might well have envied. They had lived from the cradle with magnificent monuments of art. The architecture of cathedrals, great mural paintings, incomparable sculpture, were in their very bones and marrow, so to speak. They might indeed be fit students for our courses in art appreciation; or rather, perhaps, if they were articulate, could tell their American teachers a thing or two.

• **Esthetics versus materiality . . .**

The plain, more or less reckless living of pioneer settlers still largely molds our intellectual environment. We have graduated to sleek automobiles, mechanical gadgets, radio, television, painted fingernails; but the old spirit of caring less for authentic beauty than for material pleas-

ures and comforts still pervades. We can live year after year in coal-mining communities, black and dingy, and yet, if we but have plenty to eat and cars to ride in, find satisfaction for our natures.

• **Two disciplines once highly respected . . .**

Recent and contemporary methods and content in education have undoubtedly borne fruit. I could have used to good advantage methods now employed, for example, to inculcate ease and power in public speaking. I admire students who can do things I could not have done at their age. But I remain thoroughly sold on two disciplines once highly respected, now not widely honored. I refer to diagramming and Latin.

Vast numbers of college students in freshman English classes still do not know the rudiments of their native tongue. Plain grammar, which should have yielded up to them all or most of its secrets in the high school, still eludes them.

The reason for this condition, as I view the matter, is that all along the line they have been subjected to a mass of verbiage only. Teachers have tried to *talk* adverbs, antecedents, cases, and tenses into them. Grammatical nomenclature with its strange Latin sounds has been tossed at them until they have grown immune or allergic to it from pure monotony. They have dutifully (more or less) listened, listened, listened, but they have not *seen*.

Diagramming, the graphic flashing on the blackboard of the relation of the words in the sentence one to another, the laying out for the eye to see, while the ear hears, all the independent and subordinate relationships, can make almost any student whose language-structure sense is flickering sit up and take notice. It can be an exciting, competitive game, like riddle-solving, or mathematical problems or exercises in logic. Need more be said?

As to Latin, we have to come back to it, however reluctant some unduly hasty proponents of education may be to admit the fact. Distinction in English is very seldom reached by any other than the Latin-assisted way. And even when it is, more time has been taken up with curative devices than would have been used in the actual study in the first place of that mother of western languages. We have to learn how to dissect language, to disassemble as well as to assemble it. We have to absorb it into the mental tissues. We cannot afford to be so foolish as to try to take it on as a veneer. In other words, we cannot bypass Latin.

• The fallacy in first-naming . . .

Mom and *Dad* represent very uneuphonious and otherwise crude manners of addressing our parents.

The *first-naming* mania is also crude, and should excite a still further degree of animosity. One hears chance acquaintances, young and old, everywhere reciprocating first names as if ties of blood and long-proved friendship were mere material gadgets signifying nothing spiritual or enduring.

Surely a father or a brother, for example, ought to enjoy a prerogative in this intimate matter with respect to daughter or sister not automatically shared by every Tom, Dick, and Harry that comes along.

Most other languages (perhaps all the other important ones) have two forms of *you* for the preservation of the necessary human distinction here considered. English, with its single form, is already at a disadvantage as regards a very precious shading of thought and feeling. But we carelessly (even joyously and pridefully) cheapen our situation still further with *first-naming* promiscuity.

• First-naming and Utopia . . .

A young man just entering college expressed pleasure that everybody knew him very quickly and called him by name—that is, by his first name. Now why be jubilant, in these times, over a fact like this? When every straw in the stack senses the same identical brand of imagined cordiality and fraternity, why should the proverbial needle therein egotistically rejoice in entering upon the same experience?

• Si-oot and such . . .

When I hear radio voices saying “alyooringly” or “si-oot of clothes” I cannot help muttering within myself: “Is that a man or a mouse?”

What leads me to this query is the knowledge that such pronunciation is not natural for anyone within the broad reaches of the U.S.A., and that the announcer or commentator has meekly abandoned lifelong convictions at the behest of some higher-up holding the purse-strings, who in turn acquired his occult pronunciation doctrine we know not from whom or from where.

I have associated with people for whom “dew” and “due” signified “doo”; I have even heard “schedool” and “delooge,” both quite preposterous to my southern soul. I accepted as the Ethiopian’s skin these regional idiosyncrasies, and never fell out with anyone on their account. But now I feel decidedly like going to war.

If “si-oot” is right, then why not “fri-oot”? If “Sioux” has to go so far out of its way to be “soo,” why multiply strains (in a reverse process) by making (as they do) “suicide” into “si-oo-icide”?

It is hardly necessary to insist that protecting our language from unwarranted intrusions is one of the large responsibilities of all education. “Suit” is as legitimately fixed with “oo” as is “beautiful” with “i-oo”, and radio violence should not be permitted to prevail against it. I return to the query at the beginning of this little speech, and plead for natural habits and traditions as opposed to absurd attempts to guide and control linguistic evolution.

The Autumn Issue

The next issue in late September will include articles by faculty members of Iowa State College, Lehigh University, Miami University, University of Oklahoma, University of Syracuse, Western Washington College, and Worcester Polytechnic Institute. With the issue will be included also an Index for Volume IV. The first issue of Volume V will be in the mails in early December.

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The Professor and His Domain

COLLEGE TEACHING: ITS PRACTICE AND ITS POTENTIAL
by Joseph Justman and Walter H. Mais. New York:
Harper & Brothers. 1956. viii + 257 pp. \$3.75.

THE DOMAIN OF THE FACULTY by John S. Diekhoff.
New York: Harper & Brothers. 1956. xiii + 204 pp.
\$3.00.

A professor, by the dictionary, is "one who teaches." Two professors who have spent the larger part of their professional lifetimes in teaching college students have written a book on college teaching. Some faculty people might ask, Why? Others might ask, Is it a good book?

For there are widely divergent views on this matter of college and university teaching.

One view approves the fact that the Ph.D. is an unquestioned credential for university teaching while an M.A. or M.S. is commonly acceptable for a beginning instructor. "If you know your subject, you can teach it." The more deeply you penetrate into your segment of knowledge, the better teacher you should be. In this view of teaching, teaching is not an art but a function of specialized scholarship.

If, in another view, teaching is an art, its practice demands apprenticeship, study of its nature, and mastery of its technique, not to mention the factors of talent, application, and creativity. In the highest exemplification of any art, the viewer or auditor is so aroused that he forgets artist and instrument. Under consummate teaching, the student would be so stirred, would become so absorbed in the challenge of subject and ideas that he would scarcely realize that a teacher was stimulating and guiding. It is art to conceal art, and Marie Rasey's book *This Is Teaching* closes with the suggestion that in the highest level of teaching students, reflecting on it all, might say, "We did this ourselves." Rasey's excellent book definitely holds to the view of teaching as high art.

Justman and Mais in their new book take a position midway between the two views of college teaching. They do not "presume to tell college teachers how to teach" but rather seek "to help the college teacher or prospective college teacher toward a better vision and accomplishment of his professional undertaking. The authors represent two distinct disciplines; one is a specialist in education and the other a physicist, both at Brooklyn College.

This book is the first comprehensive treatment

of college teaching in more than a decade. There have been other such books, good at their inception and still notable, but this book is not only new but distinctive. The treatment is pervaded with the experience and convictions of men who are at home in the university classroom and on the campus, who see the teaching job in its concrete aspects as well as in its broad and deep relationships with human personality and the life of society.

While there are ten chapters, the content falls under six main topics: goals of college teaching, professional responsibilities and growth of the college teacher, the teacher and his students, the college curriculum, teaching method and instructional techniques, evaluating learning and teaching. Each of the six sections if separately published would be a useful contribution to the literature of college and university teaching; assembled and correlated in a single volume they take on added significance and value.

As the starting of any intelligent enterprise demands a clear goal, the authors direct attention first to the goals of teaching:

It is not true that we drift in seas of learning without chart, compass, or rudder; it is probably true that outcomes and conduct of instruction could be improved were we inspired with clearer mutual realization of purposes.

The chapters on the professor's job and its relationships stress the acceptance by the teacher of his mission as an educator. More specifically:

The teacher's responsibility is not only to share with the students the substance of a field of learning, but also to stimulate and guide growth in mind, character, and personality.

One is instrumental to the other. Instruction is most effective when the teacher knows (1) the ends of growth to which his teaching is directed, (2) the learning qualities of his students, and (3) the ways in which the subject-matter may be shaped in order to serve its function.

The discussion of the college teacher's many concerns, opportunities, responsibilities, and possibilities should contribute to any academic reader both an enlarged understanding of his professional role and a deepened sense of its importance and dignity.

The heart of the book appropriately deals with the teacher and his students. Therein is the heart of teaching itself. The authors emphasize that, while learning tends to be identified with compre-

hension, it ought to advance much further. Ordway Tead is quoted: "At its best and most complete, learning combines thinking, feeling, acting, and expressing appropriately in relation to the demands of a confronted situation of need, desire, drive, or aspiration."

The college curriculum as an instrument of instruction is discussed in its entirety, its complexity, strengths and weaknesses, historical background and current aspects, and techniques of revision.

Teaching method and techniques are shown to grow out of conception of teaching as craftsmanship. "In essence teaching is stimulating and directing learning." Every teacher really creates his own teaching method. "In terms of his personality and experience, the purposes and subject matter of instruction, and the students he teaches, each follows the procedures he judges suitable, choosing and adapting available techniques or devising, when necessary, new ones." In the presentation of techniques of college and university teaching, it may be unfortunate that initial and perhaps excessive attention is given to the over-used lecture (professors have been said to "talk themselves to death"), but audio-visual and traditional teaching aids receive attention, together with interpretations of discussion, laboratory and workshop, small group and individual instruction, and remedial teaching.

Evaluation of learning and teaching really is a continuous process and operates in all phases of college teaching—in the choice of goals and of procedures as well as in the appraisal of outcomes. Hence the treatment of evaluation as a final chapter may contribute to an impression that it is concerned chiefly with outcomes. But the treatment of evaluation is sensible, comprehensive, and interpretative. Characteristic of the practical spirit of the book is the fact that it ends, not on a theoretical or philosophical note, but rather abruptly while dealing with student judgments. Yet throughout the text there is challenge and implication for any reader that college teaching holds an ever-present potential of improvement and growth.

Does the furtherance of the potentials of teaching demand greater attention to students? Does current college teaching utilize, or even realize, the full potential of undergraduates? Diekhoff points

to the general failure of college teachers to recognize that adult students whom they teach in evening classes are different from undergraduates. "Those who admitted a difference seemed to be saying that adults are the same as undergraduates, only worse." Would they say also that high school students are the same as undergraduates, only worse? Can teaching ever reach its potential while faculties underrate their students?

These are questions that arise after reading Diekhoff's new book on *The Domain of the Faculty*. After introductory reminders about "the mob at the gate" of the colleges and related aspects of the immediate future in higher education, the book devotes itself to two broad topics: (1) enhancing faculty competence, and (2) teaching in the evening. The author's style is individual and appealing. The reader's interest will continue even through the places where he may not agree, and he will find that, when the author is ready to stop, he does so imaginatively and significantly.

The section on enhancing faculty competence, for example, after covering aspects of instruction, preparation for college teaching, and the conditions of faculty employment, ends with a chapter entitled "And Haply May Remember." College teachers have moments of despair and moments of alarm, and they should have. As Henry Adams said, "A teacher affects eternity."

Adult education gets timely and able treatment. It involves older students with more experience and in different situations. It requires a different school and a different faculty. Its function in the present and the immediate future warrants better organization, better financing, better staffing, better status generally. "If there is a university evening college with the freedom and the courage to plan a program for adult students and to award degrees in terms of the achievement of its students, it will be unique in its service."

Implicit in this book's concern for higher education "in the day" and "in the evening" but meriting more attention is the potential involved in the interaction between vital day and evening programs. It is stimulating to a professor who ordinarily teaches undergraduates to face adult classes. Will not undergraduate education and adult education, developed each in its fulness, enrich each other?

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